

Work Order ID 65351

January 12, 2011 2:00:57 PM



Page 1

Item ID:	D4189-5	Accept		Setup	Start	
Revision ID:	PRELIM				Stop	
Item Name:	Pin					
Start Date:	1/12/11	Start Qty: 2.00		Cust Item ID:		
Required Date:	1/28/11	Req'd Qty: 2.00		Customer:		
Reference:						

Approvals:	Process Plan: <u>CZ</u>	Date: <u>11/01/12</u>	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D4189	PA1 PA2								

100		0.00				2	0		
	Hardinge CNC LATHE SMALL								
Hardinge	Memo	0.00							
Hardinge CNC Lathe Small	1-TURN AS PER FOLIO FB024 & DWG FOLIO REV: <u>N/A</u> DWG REV: <u>PA2</u> 2-DEBURR AS REQUIRED								

110	QC2- Inspect parts off machine FAI/FAIB	0.00				2	0		
QC	Memo	0.00							
Quality Control									

120	QC8- Inspect parts - second check	0.00							
QC	Memo	0.00							
Quality Control									

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

PRELIMINARY ISSUE 2 8



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 65351

January 12, 2011 2:00:57 PM



Page 2

Item ID:	D4189-5	Accept		Setup	Start	
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Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Identify as per dwg & Stock Location:	0.00							
Packaging Packaging	Memo	0.00							
	<i>Pulled on 24189-041</i>								
140 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

POSITIVE RECALL
EFFECTIVE 1.12.12 AUTH U
RELEASED _____ DATE _____

RP1344

U11-03-21

PRELIMINARY ISSUE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

January 12, 2011 2:00:57 PM

Work Order ID: 65351

Parent Item: D4189-5

Parent Item Name: Pin




Start Date: 1/12/11

Required Date: 1/28/11

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 10-12-14 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R.250  304 SS Round bar .250		Purchased	No			100	f	34.5052	0.041	0.086316			



SA 1/11/25

Location

Loc Qty

Loc Code

MAT

22.947368

114482

22.947368

MAT028

11.557868

107387

11.557868

TRP

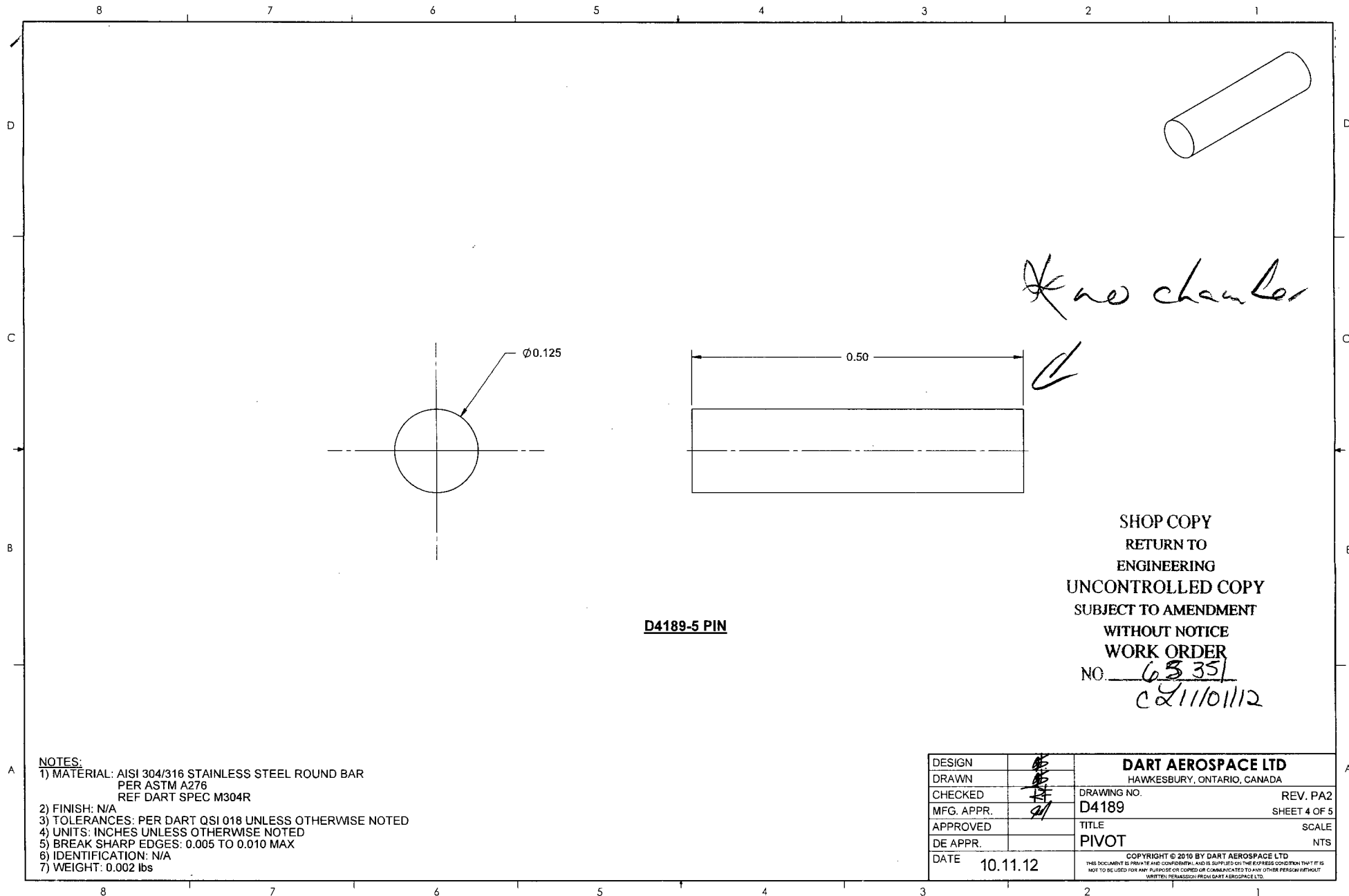
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 63351
C211/01/12

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR
 PER ASTM A276
 REF DART SPEC M304R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.002 lbs

DESIGN	<i>AS</i>	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>JS</i>	DRAWING NO.	REV. PA2
MFG. APPR.	<i>21</i>	D4189	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		PIVOT	NTS
DATE	10.11.12	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Receiving Report

Date: 10/4/23 Batch No: 11/4482
 Supplier: MARMON Dart P/O: 11720

Packing Slip: Yes ☒ No ☐ Release Note Attached: Yes ☒ No ☐ N/A ☐
 Invoice: Yes ☐ No ☒ Waybill Attached: Yes ☒ No ☐ N/A ☐
 Receipt: Cash ☐ Cr ☒ Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection ☒ N/A ☐
 Work Order 10/4/27 N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
M303R	0.750	51	48	0	3	CONVUL

Initials of receiver (if shipment OK) Level 12 LC

Production/Admin: 10/4/23
 Date
 Received/Costing LC
 Initial

Location 11

Marmon/Keystone Canada Inc.

RECEIVED APR 26 2010



Specialty Steels

290 Chemin du Tremblay Boucherville QU CAN J4B 5X9 TEL (514) 527 9153 FAX (450) 641 4357

Invoice Facture
444930
Invoice Date Date De La Facture
4/22/10

SOLD TO / VENDU A :

DART AEROSPACE LTD
1270 ABERDEEN STREET

HAWKESEBURY

ON CAN K6A 1K7

SHIPPED TO / EXPÉDIÉ À :

DART AEROSPACE LTD
1270 ABERDEEN STREET

HAWKESEBURY

ON CAN K6A 1K7

PAGE : 1

SHIP VIA / EXPÉDIÉ PAR TST OVERLAND #222212		P.O.B. / P.A.B. BOUCHERVILLE		G.S.T. / T.P.S. R137204947 Q.S.T. / T.V.Q. 2016243044 TW0001 LE	
YOUR ORDER NO. / VOTRE N° DE COMMANDE 11727		SALESPERSON/VENDEUR GHI		MARMON/KEYSTONE # 1087473	
ORDERED / COMMANDE		DESCRIPTION		SHIPPED / QUANTITE QUANTITY / EXPÉDIÉ	UNIT PRICE/PRX A L'UNITÉ
600 FT	STAINLESS STEEL TUBE A554 FINI MCULIN 304 304 ORN. TUBE 3/4" X 3/4'X .065 A554 STO .750 .750 .065 304APC Cust. part#: M304TS0.750W.065		600 FT 364 LBS 30 Pieces	2.490/FT	1,494.00 ✓
300 FT	STAINLESS STEEL SEAMLESS TUBE A213/SA213 A.W. POLISHED SMLS TUBE 304L 3/4" X .049 A213 STS .750 .049 304L Cust. part#: M304TR0.750W.049		300 FT 110 LBS 15 Pieces	1.980/FT	564.00 ✓
200 FT	STAINLESS STEEL SEAMLESS TUBE A213/SA213 A.W. POLISHED SMLS TUBE 304L 1/2" X .035 A213 STS .500 .035 304L Cust. part#: M304TR0.500W.035		200 FT 35 LBS 10 Pieces	.980/FT	196.00 ✓
24 FT	STAINLESS ROUND BAR A276,A484,A182,A479,A262 304L RD BAR CD 1/4" A276 SBR .250 CD 304L		24 FT 6 IN. 4 LBS 2 Pieces	.380/FT	9.12 ✓

RECEIVED APR 30 2010

TERMS: NET 30 DAYS
PLUS 2% PER MONTH
ON ALL OVERDUE
ACCOUNTS

TERMS: NET À 30 JOURS
PLUS 2% PAR MOIS
SUR COMPTES EN
SOUFRANCE

FOR CONDITIONS OF SALES REFER TO OUR
WEB PAGE www.mkecanada.com
Veuillez consulter notre site internet
www.mkecanada.com POUR LES CONDITIONS DE VENTE.

PAYMENT OF THIS INVOICE IS DUE BY
LE RÈGLEMENT DE CETTE FACTURE EST EXIGIBLE AU PLUS TARD LE



A Marmon Distribution Services/Berkshire Hathaway Company

G.S.T.
T.P.S.
H.S.T.

PROVINCIAL TAX
TAKE PROVINCIALE

Marmon/Keystone Canada Inc.



Specialty Steels

290 Chemin du Tremblay Boucherville QU CAN J4B 5X9 TEL (514) 527 9153 FAX (450) 641 4357

Invoice
Facture

444930

Invoice Date
Date De La Facture

4/22/10

SOLD TO / VENDU A :

DART AEROSPACE LTD
1270 ABERDEEN STREET

SHIPPED TO / EXPÉDIÉ À :

DART AEROSPACE LTD
1270 ABERDEEN STREET

PAGE : 2

HAWKESBURY

ON CAN K6A 1K7

HAWKESBURY

ON CAN K6A 1K7

SHIP VIA / EXPÉDIÉ PAR TST OVERLAND #222212		F.O.B. / F.A.B. BOUCHERVILLE		G.S.T. / T.P.S. R137204947 Q.S.T. / T.V.Q. 1016343044 TUV0001 LE	
YOUR ORDER NO. / VOTRE N° DE COMMANDE 11727		SALESPERSON / VENDEUR GHI		MARMON / KEYSTONE # 1087473	
				PROVINCIAL TAX NO 6122-5207	
				N° DE TAXE PROVINCIALE	
ORDERED / COMMANDE	DESCRIPTION	SHIPPED / QUANTITE QUANTITY / EXÉCUTÉ	UNIT PRICE / PRIX A L'UNITÉ	AMOUNT / MONTANT	
24 FT	Cust. part#.: M304R.250 STAINLESS ROUND BAR A582 SBR .500 CD 303	24 FT 2 IN. 16 LBS 2 Pieces	1.540/FT	37.22	
51 FT	Cust. part#.: M303R0.500 STAINLESS ROUND BAR A582 SBR .750 CD 303	48 FT 8 IN. 73 LBS 4 Pieces	3.600/FT	175.20	
	Cust. part#.: M303R0.750				
RECEIVED APR 26 2010					
Energy Surcharge				12.20	
ORIGINAL INVOICE / FACTURE ORIGINALE					
TERMS: NET 30 DAYS PLUS 2% PER MONTH ON ALL OVERDUE ACCOUNT			TERMS: NET 45 JOURS PLUS 2% PAR MOIS SUR COMPTES EN SOUFFRANCE		
FOR CONDITIONS OF SALES REFER TO OUR WEB PAGE www.mkcacanada.com VEUILLEZ CONSULTER NOTRE SITE INTERNET www.mkcacanada.com POUR LES CONDITIONS DE VENTE.					
PAYMENT OF THIS INVOICE IS DUE BY LE RÈGLEMENT DE CETTE FACTURE EST EXIGIBLE AU PLUS TARD LE			05/24/2010		
A Marmon Distribution Services / Berkshire Hathaway Company					
			G.S.T. T.P.S. H.S.T.		124.40
			PROVINCIAL TAX TAXE PROVINCIALE		.00
					2,612.33

Purchase Order Receipt Listing

April 23, 2010 2:20:10 PM

Page 1 of 1

All amounts are calculated in domestic currency.

All Vendors PO ID PO11727 Receipt Dates from 4/23/2010 to 4/23/2010 All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name		VC-MAR001	Marmon/Keystone Canada Ltd.								
PO11727	1		M304TS0.750W.065 f	f	4/23/2010	4/23/2010	600.0000	\$2.49	0.0000	0 ✓	\$1,494.00
CAD	No		304 SQ Tube .75x.75x.065W	f	600.0000	DCUSER		\$1,494.00	0.0000	0	
			114482								
	2		M304TR0.750W.049 f	f	4/23/2010	4/23/2010	300.0000	\$1.88	0.0000	0 ✓	\$564.00
	No		304 RD Tube .750 x .049W	f	300.0000	DCUSER		\$564.00	0.0000	0	
			114482								
	3		M304TR0.500W.035 f	f	4/23/2010	4/23/2010	200.0000	\$0.98	0.0000	0 ✓	\$196.00
	No		304 RD Tube .500 x .035W	f	200.0000	DCUSER		\$196.00	0.0000	0	
			114482								
	4		M304R.250	f	4/23/2010	4/23/2010	24.0000	\$0.38	0.0000	0	CL \$9.12
	No		304 SS Round bar .250	f	24.0000	DCUSER		\$9.12	0.0000	0	
			114482								
	5		M303R0.500	f	4/23/2010	4/23/2010	24.0000	\$1.54	0.0000	0	CL \$36.96
	No		303 Round Bar 0.500"	f	24.0000	DCUSER		\$36.96	0.0000	0	
			114482								
	6		M303R0.750	f	4/23/2010	4/23/2010	48.0000	\$3.60	0.0000	0	CL \$172.80
	No		303 Round Bar 0.750 f	f	51.0000	DCUSER		\$172.80	0.0000	0	
			114482								

Total Received Quantity:	1,196.0000
Total Qty to Inspect (PO U/M):	0.0000
Total Reject Quantity:	0.0000
Total Receipt Value:	\$2,472.88
Total Balance Due Quantity:	3.0000

Marmon/Keystone Canada Inc.



Specialty Steels

PACKING SLIP

290 Chemin du Tremblay
Boucherville QU CAN J4B 5X9
TEL. 514/527-9153
FAX. 450/641-4357

PAGE... 1
Order : 1087473
Date... 04/22/2010

SOLD TO:

SHIPPED TO:

DART AEROSPACE LTD
1270 ABERDEEN STREET

DART AEROSPACE LTD
1270 ABERDEEN STREET

HAWKESBURY ON CAN K6A 1K7

HAWKESBURY ON CAN K6A 1K7

SHIP VIA		F.O.B.	SALESPERSON	YOUR ORDER NO.	
TST OVERLAND #222212		BOUCHERVILLE	G. Dulude	11727	
Ordered	Description	Number Pieces	Quantity Shipped	Back Ordered	
	Fax all papers to Linda Lacelle 613-632-1053 Mill tests-required with all shipment				
01	600 /FT STAINLESS STEEL TUBE A554 304 ORN. TUBE 3/4" X 3/4" X .065 A554 STO .750 .750 .065 304APC Tariff Number: 7306.40.90.10 Cust. part#: M304TS0.750W.065 HT#..... HT#.....	17 13 Total... 30	340/FT 260/FT 600/FT		
02	300 /FT STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 3/4 X .049 A213 STS .750 .049 304L Tariff Number: 7304. Cust. part#: M304TR0.750W.049 HT#.....	TGB090153 Total... 15 15	300/FT 300/FT		
03	200 /FT STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 1/2 X .035 A213 STS .500 .035 304L Tariff Number: 7304. Cust. part#: M304TR0.500W.035 HT#.....	872-2783 Total... 10 10	200/FT 200/FT		
04	24 /FT STAINLESS ROUND BAR 304L RD BAR CD 1/4" A276 SBR .250 CD 304L Cust. part#: M304R.250 HT#.....	417162 Total... 2 2	24/FT 6 IN 24/FT 6 IN		
05	24 /FT STAINLESS ROUND BAR SBR .500 CD 303 Cust. part#: M303R0.500 HT#.....	422802 Total... 2 2	24/FT 2 IN 24/FT 2 IN		
06	51 /FT STAINLESS ROUND BAR SBR .750 CD 303 Cust. part#: M303R0.750 HT#.....	246473 Total... 4 4	48/FT 8 IN 48/FT 8 IN		

No. of Bcls/Boxes

0 / 1

Total Weight.....

602

Customers..

10/4/23



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO11727

Purchase Order Date 4/21/10

PO Print Date 4/21/10

Page Number 1 of 2

Order From :

VC-MAR001

FAKED
07/10/10

MARMON/KEYSTONE CANADA LTD.
290 CHEMIN DU TREMBLAY
BOUCHERVILLE, QC J4B 5X9
CA

Contact Name

Vendor Phone 800 361 8142

Vendor Fax 450 641 4357

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms Net 30

Currency CAD

FOB

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M304TS0.750W.065 <i>M11482</i>	304 SQ Tube .75x.75x.065W	4/23/10 Yes	<input checked="" type="checkbox"/> 600.00 f	TST ground	\$2.4900	\$1,494.00
	<i>ok</i>	Special Inst:	MATERIAL: AISI 304/316 SEAMLESS STAINLESS SQUARE TUBING AS PER A554 MILL FINISH OR ASTM A269 MILL FINISH				
2	M304TR0.750W.049	304 RD Tube .750 x .049W	4/23/10 Yes	<input checked="" type="checkbox"/> 300.00 f	TST ground	\$1.8800	\$564.00
	<i>ok</i>	Special Inst:	MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269				
3	M304TR0.500W.035	304 RD Tube .500 x .035W	4/23/10 Yes	<input checked="" type="checkbox"/> 200.00 f	TST ground	\$0.9800	\$196.00
	<i>ok</i>	Special Inst:	AS ABOVE				

P10/4/23

Change Nbr: 1

Change Date: 4/21/10

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO11727

Purchase Order Date 4/21/10

PO Print Date 4/21/10

Page Number 2 of 2

Order From :

VC-MAR001

MARMON/KEYSTONE CANADA LTD.
290 CHEMIN DU TREMBLAY
BOUCHERVILLE, QC J4B 5X9
CA

Contact Name

Vendor Phone

800 361 8142

Vendor Fax

450 641 4357

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD -

FOB

4	M304R.250	304 SS Round bar .250	4/23/10 Yes	24.00 f	TST ground	\$0.3800	\$9.12
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Special Inst: MATERIAL: AISI 304/316 SS ROUND
BAR
NOTE: AISI 303 NOT ACCEPTABLE

5	M303R0.500	303 Round Bar 0.500"	4/23/10 Yes	24.00 f	TST ground	\$1.5400	\$36.96
---	------------	----------------------	----------------	------------	------------	----------	---------

Special Inst: MATERIAL: AISI 303 SS ROUND BAR
NOTE: AISI 304/316 NOT ACCEPTABLE

6	M303R0.750	303 Round Bar 0.750	4/23/10 Yes	51.00 f	TST ground	\$3.6000	\$183.60
---	------------	---------------------	----------------	------------	------------	----------	----------

Special Inst: AS ABOVE

PO Total: \$2,483.68

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

U CZ

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Change Nbr: 1

Change Date: 4/21/10

**CERTIFICATE OF COMPLIANCE**

We hereby certify that the material listed below has been used to produce stainless steel tubing in accordance with specifications outlined in ASTM A554-03/EN 10204 3.1.

Type: 304
Size: 0.750"x 0.750"x 0.065"x 240.000"
Finish: As Welded
Your P.O. #: MX2006
Item Code: 50-9781

2/10/23

HEAT NO.:

4HD9

COIL NO.: 044HD9 B

CHEMICAL ANALYSIS (%):

C	Mn	P	S	Si	Cr	Mo	Ni
0.0700	1.6020	0.0310	0.0000	0.3520	18.3180	N/R	8.1370
Cu	Ti	Al	N	Co	Cb		
N/R	N/R	N/R	0.0390	N/R	N/R		

MECHANICAL PROPERTIES:

YIELD STRENGTH	TENSILE STRENGTH	ELONGATION	HARDNESS
P.S.I.	P.S.I.	%	
48530	97700	52.93	85 HRB

Mercury has not been used as an alloying material nor is it present in our processing methods.

Date: 01/21/2010

Q.C. Reviewed
12/01/25/10

Rob Kaminski
Rob Kaminski
Metallurgical Lab Technician



CERTIFICATE OF COMPLIANCE

We hereby certify that the material listed below has been used to produce stainless steel tubing in accordance with specifications outlined in ASTM A554-03/EN 10204 3.1.

Type: 304/304L
 Size: 0.750"x 0.750"x 0.065"x 240.000"
 Finish: As Welded
 Your P.O. #: MX1093
 Item Code: 50-9781

HEAT NO.: 803942B

COIL NO.: 3942B1

CHEMICAL ANALYSIS (%):

C	Mn	P	S	Si	Cr	Mo	Ni
0.0230	1.3200	0.0370	0.0020	0.3900	18.1700	N/R	8.0100
Cu	Ti	Al	N	Co	Cb		
N/R	N/R	N/R	0.0000	N/R	N/R		

MECHANICAL PROPERTIES:

YIELD STRENGTH
P.S.I.
46990

TENSILE STRENGTH
P.S.I.
97760

ELONGATION
%
54.00

HARDNESS
83 HRB

Mercury has not been used as an alloying material nor is it present in our processing methods.

Date: 10/22/2009

Rob Kaminski
 Rob Kaminski
 Metallurgical Lab Technician

Q.C. Reviewed
As 10/23/09

190 Frobisher Drive, Waterloo, Ontario, N2V 2A2
 Phone: (519) 746-0088 Fax: (519) 746-3941 (Toll Free: 1-800-563-8823)



CRYSTAL-PALACE

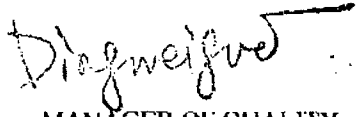
SHANGHAI CRYSTAL PALACE PIPE CO., LTD

ZHONG GANG, NAN HUI, SHANGHAI CHINA ZIP CODE: 201302

MILL TEST CERTIFICATE

ISO9001:2000 ; PED Material CERTIFICATE (No.: QAC0021058/A)

DATE OF ISSUE: 2009/11/25

CUSTOMER: MARMON/KEYSTONE CANADA INC.						CERTIFICATE NO. :2009-9-10-A-2					
P.O.NO.: MN6487						ORDER NO. :2009-9-010-A					
COMMODITY: STAINLESS STEEL SEAMLESS TUBING						GRADE : ASTM A213-07 TP304/TP304L					
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 320 GRIT.						HEAT NO. : TGB090153					
CHEMICAL CONTENTS (WT%)											
ELEMENTS		C	Mn	P	S	Si	Ni	Cr			
SPECIFICATION		≤ 0.035	≤ 2.00	≤ 0.040	≤ 0.030	≤ 0.75	8.0~12.0	18.0~20.0			
RESULTS (LADLE)		0.026	0.85	0.039	0.002	0.32	8.08	18.16			
PHYSICAL PROPERTIES											
Dimensions			Bundle No.	Pieces	Weight (kg)	0.2%YS (Mpa) ≥ 205	TS (Mpa) ≥ 515	EL (%) ≥ 35	FLATTENING TEST	HARDNESS HRB ≤ 80	EDDY CURRENT TEST TO E426 (100%)
O.D (inch)	W.T (inch)	Length (feet)									
0.500	0.049	20	P09-10-135	200	433	285	605	61.5	OK	72	OK (DRILLED HOLE)
0.750	0.049	20	09-11-22	100	337	385	640	69.0	OK	75	OK (DRILLED HOLE)
REMARKS:						1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT					
AS PER ASTM A213-07						2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.					
WALL THICKNESS TOLERANCE AS PER ASTM A269-07						SHANGHAI CRYSTAL PALACE PIPE CO., LTD					
IN COMPLIANCE TO NACE MR0175-2002						 <div style="border: 1px solid black; padding: 2px; display: inline-block;">Q.C. Reviewed 2009/11/14/2010</div>					
SOLUTION HEAT TREATMENT : 1050°C X 1.5m/min											
IC TEST TO ASTM A262 PRACTICE E											
NO WELD REPAIR WAS PERFORMED											
FREE FROM MERCURY CONTAMINATION						MANAGER OF QUALITY ASSURANCE DEPARTMENT					
COUNTRY OF ORIGIN: CHINA											
MILL TEST CERTIFICATE TO EN 10204/3.1											
INVOICE NO: YK-09-11-50											

SIS- /50- .049- -304L * 100000153 * 10000067 * MN6487 * 1/15/2010

ST-500-035-304L * 8/2-2/83 * 1002453 * BN6415 * 11/19/2009

検査成績表 (MILL CERTIFICATE)

需要家:

(CUSTOMER) MARMON/KEYSTONE CANADA

注文者: 三京物産株式会社

(SUPPLIER) (SANKYO&CO., LTD.)

品名:

(COMMODITY) SEAMLESS STAINLESS STEEL COLD DRAWN TUBE

ASTM/ASME A269/A213/SA213 (A.W.) TP304/304L

契約番号: S99CA16-B

(CONTRACT NO.)

三京不銹鋼管(沈陽)有限公司

SANKYO STAINLESS TUBE(SHEN YANG) CO., LTD.

中国・瀋陽市蘇家屯区玫瑰街115号

(NO.115 MEIGUI STREET, SUJIATUN DISTRICT, SHENYANG, P.R. CHINA)

発行日: 2009.09.29

(DATE OF ISSUE)

証明書番号: 09-0622

(CERTIFICATE NO.)

需要家管理番号: P.O.# BN6415

(CUSTOMER ORDER NO.)

寸法: 1/2" OD x 0.035" WT x 20' LG

(SIZE)

CASE NO.: 05

CONTRACT NO.													
製作番号 (Mfg. No.) (三京)	ロット番号 (Lot No.)	製造番号 (Mfg. No.)	製鋼番号 (Heat No.)	数量(Quantity)			引張試験(Tension Test)			硬さ試験 (Hardness Test) HRB	結晶粒度 (Grain Size)	へん平試験 (Flattening)	GOOD
				本数 (No. of Pcs.)	重量 (Mass)	延長 (Total Lengths)	0.2%耐力 (0.2% Y. S.)	引張り強さ (T. S.)	伸び (E.)				
(SANKYO)	指定単位(Unit Designated)			本(Pcs.)	kg	m	MPa	MPa	(%)			押し広げ試験 (Flaring)	GOOD
	規格 (Specifications)		最小(Min) 最大(Max)				170	485	35				
09-09-030	02	S99CA16-B	872-2781	90	144		305	615	60.5	72.0		外観寸法試験 (Measurement & surface)	GOOD
09-09-030	03		872-2781	53	85		300	605	61.0	71.8			
09-09-054	01		872-2783	16	26		300	600	61.2	71.5		渦電流試験 (Eddy Current)	GOOD
09-09-054	03		3C312	128	205		315 305	605 600	59.9 61.4	71.5 72.0		検鏡試験 (Microscopic)	—
TOTAL				287	460							板状腐蝕試験 (Intergranular Corrosion Test) ASTM A262 PRACTICE E	GOOD
化学成分表 (Chemical Composition) %													
製鋼番号 (Heat No.)	C × 100	Si × 100	Mn × 100	P × 1000	S × 1000	Ni × 100	Cr × 100	Mo × 100	備考(Remarks)				
最小(Min)						800	1800						
最大(Max)	3.5	100	200	45	30	1200	2000						
872-2781	3.0	46	158	28	6	810	1845						
872-2783	2.0	38	143	33	12	814	1815		SOLUTION HEAT TREATMENT: 1100℃ × 2.32Min/W.Q EN-10204-3.1 NACE MR-0175				
3C312	2.0	35	177	25	1	800	1821						
									QC REVIEWED NOV 19 2009				

上記注文品は、御指定の規格又は仕様に従って製造されその要求事項を満足していることを証明します。
(IT IS HEREWITH CERTIFIED THAT THE ABOVE MATERIALS ARE SATISFACTORY IN COMPLIANCE WITH THE REQUIREMENTS SPECIFIED IN THE CONTRACT.)

総工場長 *Long Zhang*
(MANAGER OF QUALITY SYSTEM SECTION)

Acciaierie Valbruna S.p.A.



CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204, 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.

Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Kunden / Clients:
VALBRUNA CANADA LTD
8724 HOLLGATE CRESCENT
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Hersteller/Hersteller producer

Avviso di Spedizione: D-VI06011748
Lieferanweisung/Lieferungsauftrag

Ordine nr: 601/1529 STOCK
Bestell-/Your order/Commande

Tipo di Elaborazione: E+AOD
Erweiterungserweiterung/processing/Mode of elaboration

Certificato nr: MEST349597/2006/
Prüfung/Test/Certif

Conferma ordine nr: EI06000877
Werkzeug/Order/Ref nr.

Marchio di Fabbrica:
Zeichen des Lieferanten
Trade mark
Signe de l'usine producteur

Punzone del Collaudatore:
Stempel des Werksachverständigen
Inspector's stamp/Inspection de l'expert

Opere Prove: - Annealed Cold Drawn
Prüfung/Vorbereitung/Inspection/Message

Specifiche:

Anforderungen / Requirements / Exigences

VAL CANADA 2 304/304L A,CF (3)

ASME SA182 2004 S30400/03 (1)

ASME SA479 2004 S30400/03 (4)

ASTM A262 2002A PRACTICE E

ASTM A320 2005A B6

NACE MR0175 2003 S30400/03 A (5)

(3) AMS 5639 AND ASME (1) SA320: CHEMICAL ANALYSIS ONLY.

(1) Chemical analysis only.

(3) SEC.II PT.A 2004 EDITION ADD 2005

(5) Chemical analysis only.

AMS 5639 H S30400

ASME SA182 2004 B6 (2)

ASTM A182 2005A S30400/03 (5)

ASTM A276 2005A S30400/03

ASTM A479 2005A S30400/03

CO-S-763 F 304/304L

(1) SEC.II PT.A 2004 EDITION ADD 2005

(2) SEC.II PT.A 2004 EDITION ADD 2005

(4) SEC.II PT.A 2004 EDITION ADD 2005

(6) * ISO 15156-3

AMS 5647 H S30403

ASME SA320 2004 B6 (3)

ASTM A193 2006A B6

ASTM A314 B7 S30400/03

MIL-S-662 B/1 304/304L

Qualità: T-304L
Werkstoff/Grade/Qualité

Marca: MYATSL MAXIVAL
Markenbezeichnung/Brand/Marke

Punzonatura: T-304L
Kennzeichnung/Attestung/Markierung

Pos. nr. Pos. nr. Nr. de pose	Oggetto Description Objets de pose	Dimensioni - It Abmessungen Dimensions	Tolleranza Tolerance Tolérance	Lunghezza - It Length Longueur	Colata Schmelze Metal Casting	Pezzi Stückzahl Pieces Pieces	Peso - LB Gewicht Weight Poids	Lotto nr. Lote Lot nr. Lot nr.
0060	Round	0,2500	484-05A	13 / 13	417162		15.794	603003260

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind i. Anlage erfüllt.
The material has been furnished in accordance with the requirements.
Le matériel a été fourni conforme aux exigences.

Controlli antisegregazione: OK
Vermischungsprüfung: Segregationsprüfung durchgeführt
Aussortierung Prüfung: OK
Contrôle antiségrégation: OK

Controlli visivi e dimensionali: soddisfatti le esigenze
Sichtprüfung und Abmessung ohne Beanstandung
Visual inspection and dimensional check satisfactory
Contrôle visuel et dimensionnel: satisfait

TEST	Prova/temperatura Temperatur Température Long. diam. 30mm Short diam. 10mm Short diam. 10mm Long diam. 30mm	°F	Prova Temperatur Température	Snervamento Tensile strength Tensile strength Rp 0,2% k.s.i.	Snervamento Tensile strength Tensile strength Rp 0,2% k.s.i.	Resistenza Tensile strength Tensile strength Rm k.s.i.	Allungamento Elongation Elongation E 4d %	Strizione Reduction of area Reduction of area RA %	Resilienza Resilience Resilience KJ/m² ft-lb/in²	Durezza Hardness Hardness HB 1/2 r
	Valori richiesti / Anforderungen/Requirements Valeurs demandées	min max		45	-	90 115	30	50	-	140 235
A	6,35	68	L	87		115	36	68		233

Grain size for ASTM E112

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Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata / Metall Schmelze / Casting	min - max 0,030	1,00	2,00	18,00 20,00	1,00	1,00	8,00 10,50	-	0,040	0,030	0,100	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %	-	-	-	-
417162	0,022	0,63	1,83	18,11	0,40	0,45	8,14	0,08	0,026	0,026	0,085				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1960°F for 0,5 H/H2O.

Micro and macro etch test: OK

Intergranular corrosion test per ASTM A262 pract. E: OK.

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, 4.3 by TÜV and LLOYD S

Q.C. Reviewed
JUN 06 2006

Vicenza, 04/05/06
M. Rizzotto

Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'agent d'usine

M. Rizzotto

Pagina - 1 di 1

Acciaierie Valbruna S.p.A.



CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2005), 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Bestandskunden / Clients
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
ODN-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
Hersteller / Usine producer

Aviso di Spedizione: D-VI08012179
Lieferungs/Packing list B/L

Ordine nr: 804001953 STOCK
Sperr/Totm order/Commande

Certificato nr: MEST623833/2008/
Prüfung/Test/Essai

Conferma ordine nr: E108003081
Werkz/Ord Order/Pai nr.

Marchio di Fabbrica:
Zeichen des Herstellers
Trade mark
Sigle de l'usine production



Funzione del Collaudatore:
Stempel des Werkstoffverständigen
Inspector's stamp/Person de l'essai



Oggetto Prove: - Annealed Cold Drawn
Prüfungsbefund/Inspection/Findings

Tipo di Elaborazione: E+AOD
Erzeugnisart/Manufacturing process/Mode of elaboration

Specifiche:
Anforderungen / Requirements / Exigences
VAL CANADA 2 303 A.CF
ASTM A314 97 S30300
DOD-F-24669 6 S30300
(0) SEC.II PTA 2007 EDITION

AMS 5640 U TYPE1
ASTM A320 2007A B8F
MIL-S-862 B/1 303

ASME SA320 2007 B8F (0)
ASTM A582 2005 S30300
QQ-S-764 B/2 303

OK 10-04-23

Qualität T-303
Werkstoff/Grade/Qualité

Markenbezeichnung/Brand/Marque
MARCO: MVTB8ZHS MAXIVAL

Punzonatura: T-303
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. N. de pose	Oggetto Geometrie Product description Description de l'objet	Dimensioni - in Abmessungen Dimensions	Tolleranza Tolérance Allowance Tolérance	Lunghezza - in Länge Length Longueur	Chiusa Schluss First Couple	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0051	Round	0,7500	484-06B	148 / 148	246473		10.344	734900090

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind befriedigt
The material has been furnished in accordance with the requirements
Le matériel a été fourni conforme aux exigences

Controllo antimiscelazione: OK
Vermischungsprüfung: spezialisiert/technisch durchgeführt
Antiblocking testing performed: OK
Contrôle antimélange fait: r.s.b.

Controllo visivo e dimensionale: soddisfatta le esigenze:
Sichtprüfung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional check satisfactory
Contrôle visuel et dimensionnel: satisfaisant

The material has been furnished in accordance with the requirements Le matériau a été fourni conforme aux exigences						Controlle and metrology lab: I.S.G.		Laboratoire de vérification des dimensions et des matériaux				
TEST	Provette/rosette Spannungsmessgerät Long diam. Spec. Größe Diam. Spez. Long diam. Spec. Long diam. Spec. mm	°F	Post. Sugge. Forderung Anforderung	Snervamento Zugversuch Yield Stress Yield Stress Rp 0,2% k.s.i.	Snervamento Zugversuch Yield Stress Yield Stress Yield Stress k.s.i.	Resistenza Zugversuch Tensile strength Resistance à traction Rm k.s.i.	Allungamento Zugversuch Elongation Allongement E 4d %	Strizione Zugversuch Reduction of area Striction RA %	Resistenza Zugversuch Impact Value Resistance	Durezza Härte Hardness Dureté HB		
Valori richiesti / Anforderungen/required values Valeurs requises		min max		30	-	75	-	35	-	50	-	140 241
A	12,5	68	L	68		101		41		52		240

1) = length/abmessungen, 2) = weight/gewicht, T = Target/zielvorgabe

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelze/Couée	min - max 0,150	1,00	2,00	17,00 19,00	0,80	1,00	8,00 10,00	0,15	0,15 0,40	0,40	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %			
246473	0,040	0,42	1,74	17,20	0,51	0,49	8,21	0,100	0,03	0,32	0,01			

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0.5h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, s.4.3 by TÜV and Lloyd's

O.C. Reviewed
24.06/27/08

Vicenza, 30/04/08 V00000 (Mod. MDER)	Il collaudatore di stabilimento / der Werkstoffverständiger / Works Inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 1
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Acciaierie Valbruna s.p.a.

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Clienti / Destinatari/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLLGATE CRESCENT
LST 5Z1-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Hersteller/Hersteller/Hersteller

Oggetto Prove: - Annealed Cold Drawn
Prüfunggegenstand/Examined object/Prüfunggegenstand

Arrivo di Spedizione: D-VI09010751
Lieferung/Packing label

Ordine nr: 904002237 Stock - Canada
Bestell/Nr oder Kommando

Tipo di Elaborazione: E-AOD
Erweiterungsphase/Working process/Mode elaboration

CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2005) , 3.1

Certificato nr: MEST746116/2009/
Prüfung/Inspektion

Conferma ordine nr: E109002088
Werkstoff Order/Nr.

Marchio di Fabbrica:
Zeichen des Lieferanten
Trade mark
Signe de l'usine productrice

Funzione del Collaudatore:
Sammel des Verantwortlichen
Inspector's stamp/Fonction de l'inspecteur

Specifiche:
Anforderungen / Requirements / Exigences

VSI 0 303 HS A.CF
ASME SA320 2007 B8F 0
ASTM A370 2009
QQ-S-764 B/2 303 A
ISO SEC II PT A 2007 EDITION ADD. 2008a
(1) Chemical analysis only.

AMS 5640 U S30300 A
ASTM A314 2008 S30300
ASTM A582 2005 S30300 A

AMS 5640 U TYPE 1 A
ASTM A320 2008 B8F (1)
MIL-S-862 B/1 303

0Chemical analysis only.

Qualità: T-303
Werkstoff/Grade/Qualität

Marca: MV188ZHS MAXIVAL
Markenbezeichnung/Brand/Marken

Pos. Nr. Pos. nr. N. de pos.	Oggetto Object Description	Dimensioni in Abmessungen Dimensions	Tolleranze Toleranz Tolerance	Dimensione Länge Length	Costo Kosten Cost	Pezzi Stücken Pieces	Peso - LB Gewicht Weight	Lotto nr. Losn. Lot N.
0010	Round	0,5000	434-06B	145 / 145	422802		2,571	818603790

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind in Anlage erfüllt
The material has been furnished in accordance with the requirements
Le matériel a été fourni conforme aux exigences

Controllo antimiscelazione: OK
Verunreinigungsprüfung: einschließlich visuell durchgeführt
Integrating testing performed OK
Externe schmelzgefäße: i.s.t.

Controllo visivo e dimensionale: soddisfa le esigenze:
Bauseinsicht und Abmessung: ohne Beanstandung
Visual inspection and dimension: satisfactory
Contrôle visuel et dimension: satisfaisant

TEST	Prove/Prüfung Speichereigenschaften Lagerungseigenschaften Storage Properties Lagerungseigenschaften Lagerungseigenschaften Lagerungseigenschaften	°F	min max	Snervamento Speichereigenschaften Yield Stress Yield Stress Rp 0,2% K.S.I.	Snervamento Yield Stress Yield Stress Rp 0,2% K.S.I.	Resistenza Zugfestigkeit Tensile Strength Rm K.S.I.	Allungamento Zugdehnung Elongation A %	Stirazione Elongation Reduction of area RA %	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Härte Hardness HB
Valori richiesti / Anforderungen/Requirements / Vorgaben/Specifications										140 255
A	12,5	68	L	B5		110	37	52		253

(1) - longitudinalmente, T - transversalmente, D - diametralmente

Mechanical properties according to ASTM A370.

Grain size for ASTM E112

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Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelz/Couée	min 0,030 max 0,080	0,20 1,00	1,50 2,00	17,00 19,00	0,60 1,00	1,00 2,00	8,00 10,00	0,100 0,150	0,30 0,40	0,4000					
C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %					
422802	0,042	0,44	1,81	17,42	0,41	0,63	6,20	0,09	0,027	0,34	0,0044				

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0.5 h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, 2, 4, 3 by TÜV and LLOYD'S

MARMON / KEYSTONE

C.C. REVIEWED

DATE INITIAL

08/09

Vicenza, 07/05/09

U00000
(Mod. MCEH)

Il collaudatore di stabilimento / der Werkstoffverständiger / Works inspector / L'agent d'usine

M. Rizzotto

Pagina - 1 di 1

60002 / LZ / 8 / * VS0060 * 1002948 * 422802 * R - 303 - CD - 500 - SBR -